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Neurolab research hits stride

Two-week flight lifts off one day late, but research proceeds apace

the human nervous system will continue next week as the two-weeklong Neurolab mission employs a combination of human and animal subjects to study questions of interest in space and on Earth.

Shuttle managers are expected to decide this week whether there are enough consumables on board the Space Shuttle Columbia to support a one-day extension of the mission. Pre-launch plans called for a landing at 11:09 a.m. CDT May 3 at Kennedy Space Center, but the landing could be pushed back a day, to May 4, to accommodate an

Research into the intricacies of extra day of science investigations.

The launch of Columbia and its seven-member crew was delayed one day when pre-launch checks of communications equipment turned up a failed network signal processor. The need for two functional systems to send commands from the ground to the shuttle and back forced the launch team to enter the vehicle and change out the signal processor.

Launch occurred the next day, April 17, on time at 1:19 p.m., and featured the first use of the orbital maneuvering system engines in a test to see how well they could work in tandem with the shuttle's three

main engines to boost additional cargo into orbit for assembly flights to the International Space Station. Crew members reported the test went smoothly.

Once on orbit, Commander Rick Searfoss along with Pilot Scott Altman, Mission Specialists Rick Linnehan, Kay Hire and Dave Williams, and Payload Specialists Jay Buckey and Jim Pawelczyk immediately began activating the Spacelab module and moving ahead with their research, supported on the ground by an international team of researchers.

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Columbia lifts off from Launch Pad 39B at Kennedy Space Center to begin the STS-90 Neurolab mission.



President Bill Clinton voiced strong support for NASA during a visit here April 14, saying he is "committed to maintaining a strong, stable, balanced space program" and expressing admiration for the work of JSC's scientists, engineers, astronauts and other workers.

Clinton also gave a pre-flight pep talk to the STS-90 crew in Florida via a two-way audio-video hookup with Kennedy Space Center's crew quarters during a visit to Houston that also involved participation in a televised roundtable on discrimination and sports.

"On behalf of all your fellow Americans, I want to thank you, those of you who work here, for expanding the frontiers of our knowledge, launching our imaginations, helping our spirits to soar," Clinton told about 300 JSC employees who gathered in Bldg. 9. "Each of you, our scientists, our engineers, our astronauts, those of you who work in other capacities, embody the bold, restless pioneering spirit of America.

"Thanks to NASA, America has met President Kennedy's challenge of becoming the world's leading space-faring nation," the President continued. "We've Please see CLINTON, Page 8

Steering council tightens computer password security

JSC Photo S98-05024 by Joe McNally, National Geographic, for NASA

Changing computer passwords is a routine part of daily life at JSC, and starting May 5 there will be one more for some users to change. But this one will put the center on a path that could eventually lead to the elusive "single log-on" that will allow users access to all the systems they need with a single ID.

JSC's Information Resource Management Steering Council has decided that it's time to begin taking steps to improve computer security and authentication processes. One way to do that is by changing passwords on a regular basis. The JSC Automated Information Systems Security Manual requires that passwords be changed at least every 90 days for general purpose workstations and networks.

A large crowd of JSC employees listen to President Bill Clinton during an April 14 visit to

the center. On the dais with the President (seated, from the left) are JSC Director George

Abbey, U.S. Sen. Nick Lampson (D.-TX), and Houston Mayor Lee Brown. Standing behind

them are members of the STS-95 crew: (from the left) Pedro Duque of ESA, Chiaki Mukai

of NASDA, U.S. Sen. John Glenn Jr. (D.-Ohio), Stephen Robinson, Scott Parazynski,

Steven Lindsey (behind Clinton) and Curtis Brown Jr. Out of the frame is NASA

Administrator Daniel S. Goldin who also addressed the crowd. The Chief Executive earlier

had gone inside several of the shuttle and ISS crew training facilities and mockups.

While some users already voluntarily change their passwords regularly, one of the most widely used systems, the JSC NT Domain, has not forced users of institutional computer services such as Microsoft Exchange e-mail, Schedule+ or any of the institutional file servers to change their passwords. That's pretty much everybody who uses a computer at JSC.

"The agency and center are placing continually increasing emphasis on substantially improving the protection of our information resources," said Carroll Dawson, deputy Chief Information Officer. "JSC is aggressively pursuing implementation of a wide range of technologies from sophisticated "firewalls" around our networks to "single

log-on" authentication processes which enable access to all resources available to a user. A key element of this comprehensive security initiative is an effective process for individual password protection.

As of May 5, the IRMSC has decided, users of the JSC NT Domain will be required to change their password at least every 90 days.

JSC Domain passwords will begin to expire on May 5. "Expire" means Please see **DOMAIN**, Page 8

Space station long spacer element arrives at KSC

By James Hartsfield

The long spacer, one of two structures that will make up a truss to support the first solar arrays for the International Space Station, arrived at the Kennedy Space Center's Space Station Processing Facility earlier this

Built in Tulsa, Okla., by Boeing-Canoga Park, construction of the flight article began in the fall of 1996. Along with the integrated electronics assembly which arrived at KSC in January,

the long spacer completes the trusses that will support the first solar arrays for the station.

Within the next two months, radiators, pump-control systems, batteries and related electronics will arrive at Kennedy. In the fall, the first set of International Space Station solar arrays will arrive at KSC, completing the set of equipment and trusses that comprise the first station Photovoltaic Module.

"The Element Integration Office here at JSC, especially Steve Porter Please see **LONG**, Page 2



The Long Spacer, a component of the International Space Station, arrives and is moved to its test stand in Kennedy Space Center's Space Station Processing Facility. It is being processed in preparation for launch aboard Discovery in April 1999.